

OBSERVATIONS & RECOMMENDATIONS

After reviewing data collected from **SPOFFORD LAKE** the program coordinators recommend the following actions.

FIGURE INTERPRETATION

- Figure 1: These graphs illustrate concentrations of chlorophyll-a in the water column. Algae are microscopic plants that are a natural part of lake ecosystems. Algae contain chlorophyll-a, a pigment necessary for photosynthesis. A measure of chlorophyll-a can indicate the abundance of algae in a lake. The historical data (the bottom graph) show a *stable* in-lake chlorophyll-a trend. As the summer progressed, chlorophyll concentrations decreased. Mean concentrations were slightly increased this season, however they have remained below the NH mean reference line for 12 years! While algae are present in all lakes, an excess amount of any type is not welcomed. Concentrations can increase when there are external and internal sources of phosphorus, which is the nutrient algae depend upon for growth. It's important to continue the education process and keep residents aware of the sources of phosphorus and how it influences lake quality.
- Figure 2: Water clarity is measured by using a Secchi disk. Clarity, or transparency, can be influenced by such things as algae, sediments from erosion, and natural colors of the water. The graphs on this page show historical and current year data. The lower graph shows a *fairly stable, but slightly decreasing*, trend in lake transparency. Water clarity decreased this season possibly as a result of the slight increase in algal abundance, and also the 2000 sampling season was considered to be wet. Average transparency readings were expected to be slightly lower than last year's readings for most lakes as a result of a wetter summer. Higher amounts of rainfall usually cause more eroding of sediments into the lake and streams, thus decreasing clarity. The mean clarity at Spofford Lake remained well above the New Hampshire mean.
- Figure 3: These figures show the amounts of phosphorus in the epilimnion (the upper layer in the lake) and the hypolimnion (the lower layer); the inset graphs show current year data. Phosphorus is the limiting nutrient for plants and algae in New Hampshire waters. Too much phosphorus in a lake can lead to increases in plant growth

over time. These graphs show a *stable* trend for in-lake phosphorus levels. Phosphorus concentrations were below the median for NH lakes this year. Mean hypolimnetic phosphorus concentrations were the lowest Spofford Lake has ever experienced! Increases in phosphorus later in the summer did not affect chlorophyll-a. One of the most important approaches to reducing phosphorus levels is educating the public. Humans introduce phosphorus to lakes by several means: fertilizing lawns, septic system failures, and detergents containing phosphates are just a few. Keeping the public aware of ways to reduce the input of phosphorus to lakes means less productivity in the lake. Contact the VLAP coordinator for tips on educating your lake residents or for ideas on testing your watershed for phosphorus inputs.

OTHER COMMENTS

- After several years of excessive pondweed (*Potamogeton*) growth, this year Spofford Lake was nearly devoid of plants. This is as much a mystery to us as it is to the volunteers. With the epilimnetic phosphorus slightly elevated this year we would have expected more plant growth. This was not the case, however. We will continue observe the abundance of this plant.
- In 2000, small amounts of the blue-green alga *Anabaena* were observed in the plankton sample (Table 2). Blue-green algae can reach nuisance levels when sufficient nutrients and favorable environmental conditions are present. While overall algal abundance continues to be low in the lake, the presence of these indicator species should serve as a reminder of the lake's delicate balance. Continued care to protect the watershed by limiting or eliminating fertilizer use on lawns, keeping the lake shoreline natural, and properly maintaining septic systems and roads will keep algae populations in balance.
- The Inlets had much lower mean conductivities this summer (Table 6) than in previous years. Conductivity was particularly low in the watershed this year, most likely as a result of the excess rains, which tend to dilute and remove pollutants from surface waters. Conductivity increases often indicate the influence of human activities on surface waters, so this decreasing trend is a positive sign. Septic system leachate, agricultural runoff, iron deposits, and road runoff can each influence conductivity readings. There was a slight increase in the in-lake conductivity, but it was not excessive.
- **Please note** in July the in-lake and Shield Inlet phosphorus levels were recorded as less than 5 µg/L. The NHDES Laboratory Services adopted a new method of analyzing total phosphorus this year and the lowest value that can be recorded is 'less than 5 µg/L'. We would like to remind the association that a reading of 5 µg/L is considered low for New Hampshire's waters.

- The Seamans Inlet had its lowest mean phosphorus value in the history of VLAP sampling at Spofford Lake (Table 8). In contrast, the Shield Inlet had its highest mean phosphorus value this year, as well as high turbidity. The high turbidity suggests that either the samples were contaminated with bottom sediment, or erosion was occurring in the Shield Inlet subwatershed. The Shield Inlet had more varied results than the Seamans Inlet.
- Dissolved oxygen was again high at all depths of the lake (Table 9). As stratified lakes age, oxygen is depleted in the lower layer by the process of decomposition. The lack of this aging indicator is a sign of the lake's overall health.
- *E. coli* originates in the intestines of warm-blooded animals (including humans) and is an indicator of associated and potentially harmful pathogens. Bacteria concentrations were low at the sites tested (Table 12). The highest observed *E. coli* count was at the Spofford Hall Pipe site on July 18, but the result was not above the state standard for surface waters. If residents are concerned about septic system impacts, testing when the water table is high or after rains is best. Please consult the Other Monitoring Parameters section of the report for the current standards for *E. coli* in surface waters.
- We would like to visit the lake next summer in mid to late August for a dissolved oxygen test and to collect plankton. We have not been to the lake at this time of the summer in the past. There may be a change in oxygen concentration later in the summer.

NOTES

- Monitor's Note (6/13/00): Trib flow unusually high and fast moving. Lots of recent rain and probably less lake use than normal. Conductivity test at Clarkdale Pipe is high and attributable to failing septic system.
- Monitor's Note (8/22/00): Much, much rain this summer—lake level very high; 35" above normal rainfall year to date; virtually no weeds or algae

USEFUL RESOURCES

Comprehensive Shoreland Protection Act, RSA 483-B, WD-BB-35, NHDES Fact Sheet. (603) 271-3503 or www.state.nh.us

Water Sampling Protocol for E. coli Testing, NHDES Fact Sheet, (603) 271-3503 or www.state.nh.us

Answers to Common Lake Questions, NHDES-WSPCD-92-12, NHDES Booklet, (603) 271-3503.

2000

Anthropogenic Phosphorus and New Hampshire Waterbodies, NHDES-WSPCD-95-6, NHDES Booklet, (603) 271-3503

Vegetated Phosphorus Buffer Strips, NH Lakes Association pamphlet, (603) 226-0299 or www.nhlakes.org

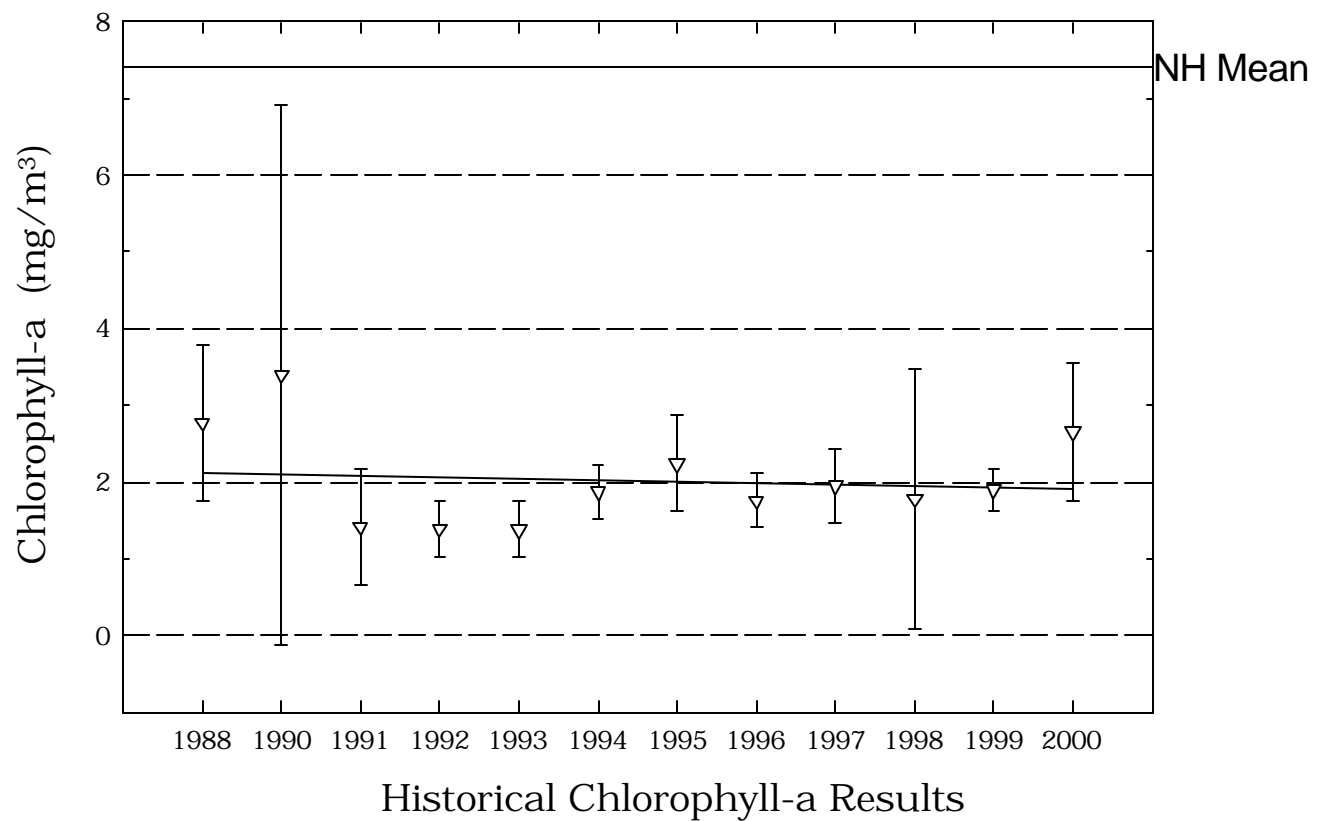
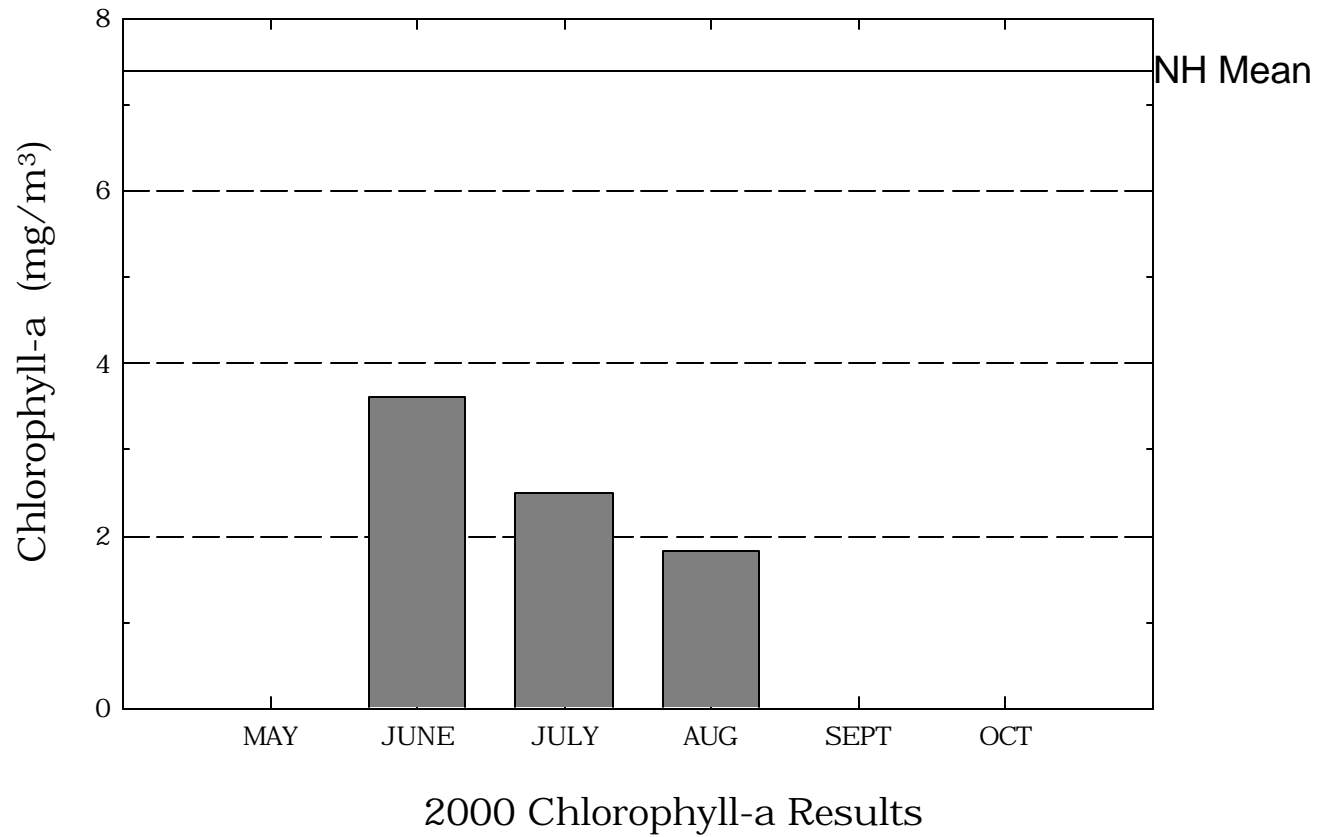
The Lake Pocket Book, The Terrene Institute, 2000. (800) 726-5253, or www.terrene.org

The Wetlands Resource, WD-WB-7, NHDES Fact Sheet, (603) 271-3503 or www.state.nh.us

What Can You Do to Prevent Shoreland Erosion?, WD-BB-30, NHDES Fact Sheet, (603) 271-3503 or www.state.nh.us

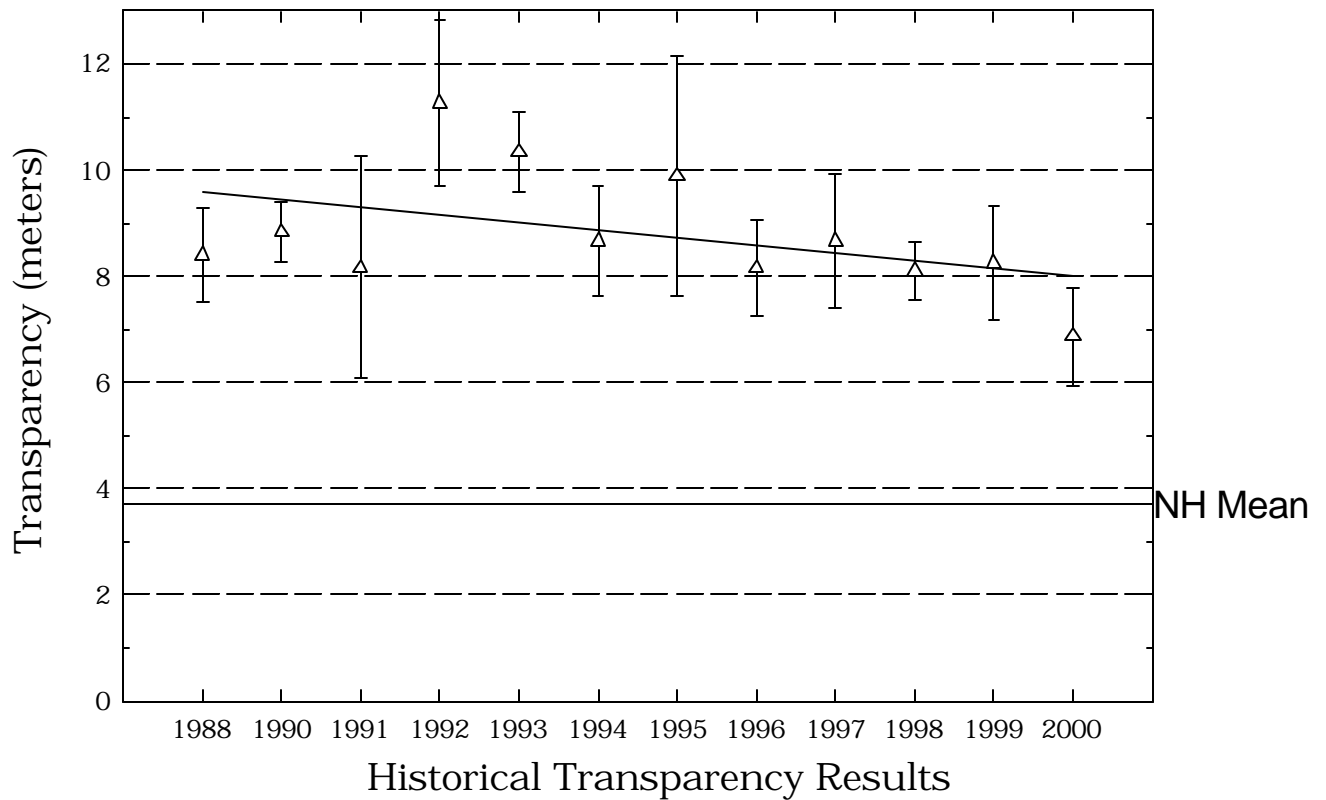
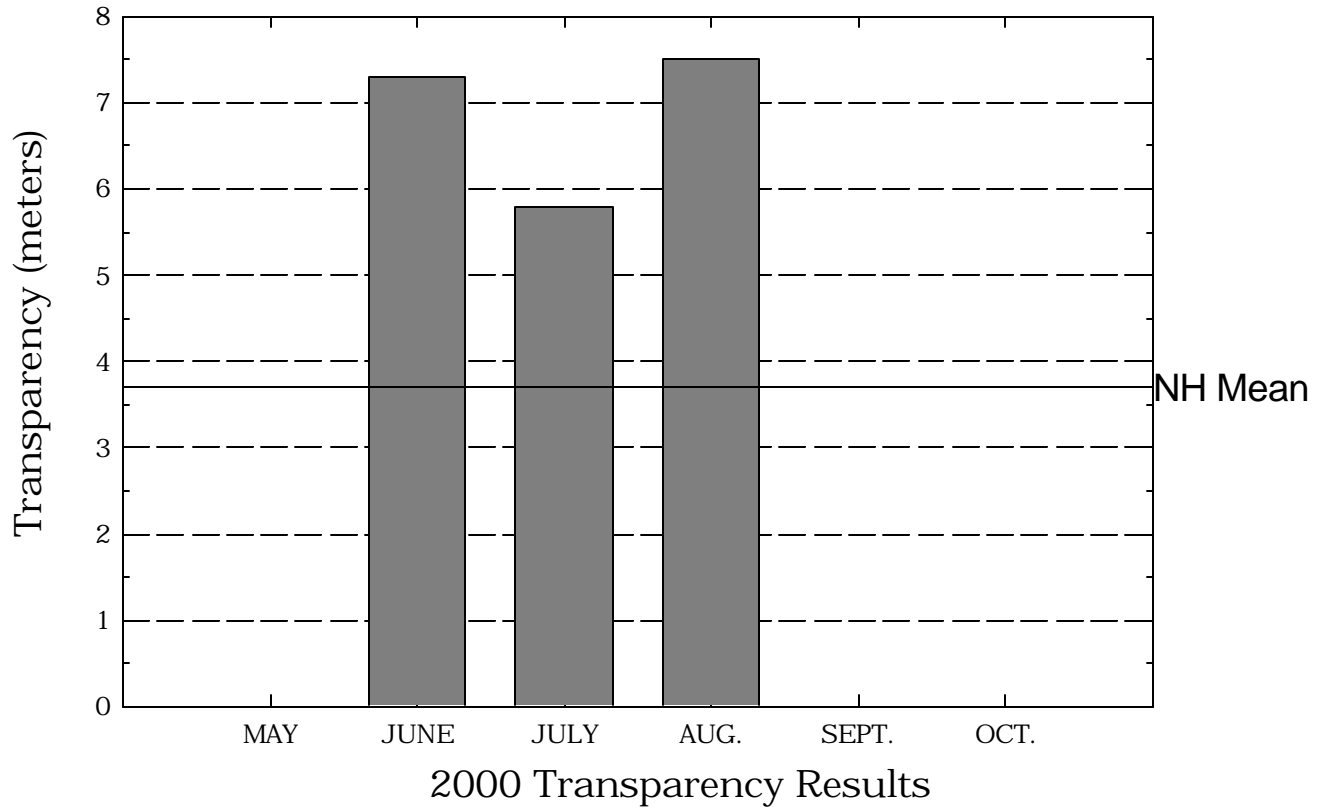
Spofford Lake

Figure 1. Monthly and Historical Chlorophyll-a Results



Spofford Lake

Figure 2. Monthly and Historical Transparency Results



Spofford Lake

Figure 3. Monthly and Historical Total Phosphorus Data.

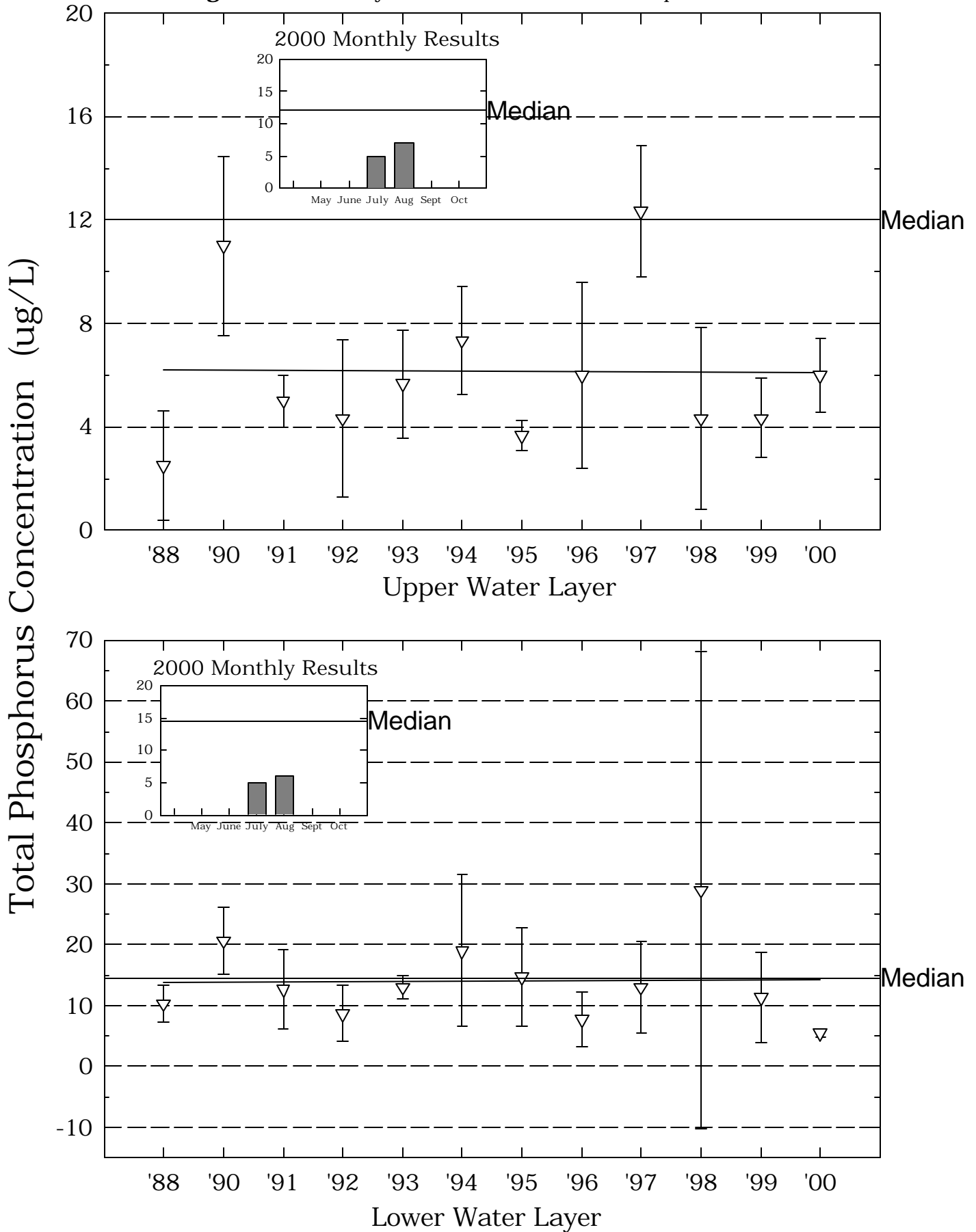


Table 1.**SPOFFORD LAKE
CHESTERFIELD****Chlorophyll-a results (mg/m³) for current year and historical
sampling periods.**

Year	Minimum	Maximum	Mean
1988	2.04	3.49	2.76
1990	1.23	7.46	3.39
1991	0.65	2.18	1.41
1992	1.09	1.80	1.38
1993	1.07	1.78	1.37
1994	1.47	2.16	1.86
1995	1.64	2.89	2.08
1996	1.47	2.16	1.76
1997	1.45	2.42	1.94
1998	0.17	3.53	1.78
1999	1.66	2.21	1.89
2000	1.83	3.62	2.65

Table 2.

**SPOFFORD LAKE
CHESTERFIELD**

Phytoplankton species and relative percent abundance.

Summary for current and historical sampling seasons.

Date of Sample	Species Observed	Relative % Abundance
06/22/1988	DINOBRYON	77
07/26/1988	DINOBRYON	41
	CERATIUM	21
	ASTERIONELLA	19
07/19/1990	CERATIUM	50
	DINOBRYON	16
07/16/1991	CERATIUM	43
	DINOBRYON	10
07/14/1992	DINOBRYON	78
	ANABAENA	8
	UPHANACAPSA	4
07/20/1993	DINOBRYON	70
	TABELLARIA	21
07/19/1994	ASTERIONELLA	31
	DINOBRYON	23
07/18/1995	DINOBRYON	55
	CERATIUM	10
	UNKNOWN TAXON	8
07/18/1995	DINOBRYON	55
	CERATIUM	10
	UNKNOWN TAXON	8
07/17/1996	TABELLARIA	80
	DINOBRYON	9
	ASTERIONELLA	6
07/15/1997	TABELLARIA	24
	DINOBRYON	24
	ASTERIONELLA	15

Table 2.

**SPOFFORD LAKE
CHESTERFIELD**

**Phytoplankton species and relative percent abundance.
Summary for current and historical sampling seasons.**

Date of Sample	Species Observed	Relative % Abundance
07/14/1998	CHRYSOSPHAERELLA	93
	CERATIUM	3
	ASTERIONELLA	2
07/13/1999	UNKNOWN SPHERE	44
	SPHAEROCYSTIS	11
	ASTERIONELLA	10
07/18/2000	TABELLARIA	46
	DINOBRYON	21
	ANABAENA	9

Table 3.**SPOFFORD LAKE
CHESTERFIELD****Summary of current and historical Secchi Disk
transparency results (in meters).**

Year	Minimum	Maximum	Mean
1988	7.5	9.3	8.4
1990	8.5	9.5	8.8
1991	6.5	10.5	8.1
1992	9.5	12.5	11.2
1993	9.5	11.0	10.3
1994	7.5	9.5	8.6
1995	7.5	12.0	9.9
1996	7.2	9.0	8.1
1997	7.5	10.0	8.6
1998	7.5	8.5	8.1
1999	7.5	9.0	8.2
2000	5.8	7.5	6.8

Table 4.**SPOFFORD LAKE
CHESTERFIELD**

**pH summary for current and historical sampling seasons.
Values in units, listed by station and year.**

Station	Year	Minimum	Maximum	Mean
CAMP INLET	1992	6.62	6.74	6.68
	1993	6.61	6.74	6.67
	1994	6.45	6.78	6.63
	1995	6.35	6.69	6.49
	1996	6.69	6.75	6.72
	1997	6.58	7.01	6.73
	1998	6.42	6.75	6.55
	1999	6.53	6.83	6.63
	2000	6.49	6.80	6.65
EPILIMNION	1988	6.99	7.07	7.03
	1990	6.94	7.12	7.03
	1991	6.52	7.02	6.78
	1992	6.93	7.02	6.96
	1993	6.75	7.28	7.02
	1994	6.95	7.14	7.03
	1995	6.81	7.18	6.95
	1996	6.70	7.17	6.90
	1997	7.13	7.36	7.20
	1998	6.95	7.18	7.08
	1999	6.81	6.98	6.88
	2000	6.85	7.17	7.01

Table 4.

**SPOFFORD LAKE
CHESTERFIELD**

**pH summary for current and historical sampling seasons.
Values in units, listed by station and year.**

Station	Year	Minimum	Maximum	Mean
HYPOLIMNION	1988	6.45	6.67	6.57
	1990	6.33	6.43	6.36
	1991	6.47	6.66	6.57
	1992	6.59	6.66	6.64
	1993	6.43	6.47	6.46
	1994	6.35	6.66	6.48
	1995	6.31	6.74	6.53
	1996	6.40	6.80	6.53
	1997	6.44	6.72	6.60
	1998	6.24	6.47	6.32
	1999	6.34	6.92	6.51
	2000	6.19	6.52	6.35
INLET				
	1991	6.49	6.49	6.49
METALIMNION				
	1988	6.87	7.04	6.95
	1990	6.93	7.05	7.01
	1991	6.90	7.11	7.02
	1992	6.86	7.23	7.05
	1993	6.74	6.95	6.87
	1994	6.92	7.26	7.05
	1995	7.07	7.14	7.10
	1996	6.79	6.99	6.87
	1997	7.04	7.23	7.10

Table 4.

**SPOFFORD LAKE
CHESTERFIELD**

**pH summary for current and historical sampling seasons.
Values in units, listed by station and year.**

Station	Year	Minimum	Maximum	Mean
OUTLET	1998	6.89	7.12	6.97
	1999	6.61	6.84	6.74
	2000	6.56	7.02	6.76
OUTLET	1988	6.64	6.78	6.70
	1990	6.85	7.27	6.96
	1991	6.40	7.06	6.69
	1992	6.89	7.06	6.99
	1993	6.83	6.94	6.88
	1994	6.41	7.42	6.78
	1995	6.68	6.97	6.80
	1996	6.78	6.97	6.89
	1997	7.05	7.21	7.12
	1998	6.82	6.98	6.89
	1999	6.83	7.09	6.92
	2000	6.60	7.02	6.81
SEAMANS INLET	1991	7.14	7.70	7.34
	1992	6.84	7.53	7.17
	1993	6.99	7.68	7.21
	1994	7.17	7.65	7.31
	1995	7.46	7.56	7.51
	1996	6.48	7.47	6.80
	1997	7.21	7.77	7.46
	1998	7.03	7.50	7.17
	1999	7.18	7.41	7.31

Table 4.

**SPOFFORD LAKE
CHESTERFIELD**

**pH summary for current and historical sampling seasons.
Values in units, listed by station and year.**

Station	Year	Minimum	Maximum	Mean
SHIELD INLET	2000	6.48	7.27	6.80
	1992	6.65	7.23	6.85
	1993	6.74	6.74	6.74
	1994	6.96	6.96	6.96
	1995	7.08	7.08	7.08
	1996	6.55	6.78	6.65
	1997	7.08	7.08	7.08
	1998	6.98	7.02	7.00
	1999	7.10	7.33	7.20
SPOFFORD LAKE	2000	6.48	7.02	6.73
WARES GROVE INLET	1996	6.87	6.87	6.87
	1991	6.54	6.60	6.57
	1992	6.44	6.69	6.52
	1993	6.38	6.61	6.50
	1994	6.26	6.98	6.49
	1995	6.24	6.57	6.37
	1996	6.40	6.53	6.47
	1997	6.51	6.75	6.58
	1998	6.37	6.58	6.47
	1999	6.54	6.59	6.57
	2000	6.21	6.56	6.41

Table 5.**SPOFFORD LAKE
CHESTERFIELD**

**Summary of current and historical Acid Neutralizing Capacity.
Values expressed in mg/L as CaCO₃.**

Epilimnetic Values

Year	Minimum	Maximum	Mean
1988	5.90	6.60	6.23
1990	4.90	6.20	5.60
1991	6.60	6.90	6.77
1992	6.10	17.40	9.97
1993	6.80	7.40	7.17
1994	4.80	7.60	6.47
1995	6.40	7.90	7.07
1996	5.60	7.50	6.80
1997	6.10	8.00	7.10
1998	6.30	7.20	6.87
1999	6.90	7.90	7.30
2000	7.30	7.80	7.57

Table 6.

**SPOFFORD LAKE
CHESTERFIELD**

**Specific conductance results from current and historic
sampling seasons. Results in uMhos/cm.**

Station	Year	Minimum	Maximum	Mean
CAMP INLET	1992	288.0	302.6	295.3
	1993	34.0	203.0	118.5
	1994	199.0	378.0	307.6
	1995	235.7	412.0	323.8
	1996	131.7	227.0	179.3
	1997	188.0	357.0	295.6
	1998	209.0	408.0	296.5
	1999	300.2	340.2	326.7
	2000	109.8	164.8	143.8
EPILIMNION	1988	92.0	95.1	93.5
	1990	98.8	98.9	98.8
	1991	100.3	101.2	100.6
	1992	102.1	104.9	103.1
	1993	106.4	109.9	108.1
	1994	109.7	113.0	111.0
	1995	108.8	112.9	111.2
	1996	111.4	114.8	112.7
	1997	114.1	116.6	115.7
	1998	115.5	121.9	118.5
	1999	120.1	125.3	123.1
	2000	124.8	125.8	125.3
HYPOLIMNION	1988	90.5	94.2	92.4

Table 6.

**SPOFFORD LAKE
CHESTERFIELD**

**Specific conductance results from current and historic
sampling seasons. Results in uMhos/cm.**

Station	Year	Minimum	Maximum	Mean
	1990	98.3	106.7	102.8
	1991	98.8	102.8	100.5
	1992	102.7	104.4	103.6
	1993	105.3	107.8	106.6
	1994	106.1	117.0	112.3
	1995	110.0	115.8	111.6
	1996	113.4	115.1	114.4
	1997	113.6	115.6	114.7
	1998	110.6	121.3	117.5
	1999	121.9	126.8	123.7
	2000	127.3	136.9	131.4
INLET				
	1991	219.4	219.4	219.4
METALIMNION				
	1988	92.0	92.0	92.0
	1990	97.4	99.8	98.7
	1991	97.6	100.9	99.3
	1992	101.4	103.8	102.9
	1993	104.8	107.8	105.9
	1994	108.6	112.3	110.3
	1995	109.7	110.9	110.1
	1996	113.7	114.3	114.0
	1997	114.1	115.5	115.0
	1998	117.1	119.9	118.3
	1999	120.0	124.4	122.4

Table 6.

**SPOFFORD LAKE
CHESTERFIELD**

**Specific conductance results from current and historic
sampling seasons. Results in uMhos/cm.**

Station	Year	Minimum	Maximum	Mean
OUTLET	2000	125.9	126.8	126.3
	1988	95.1	101.2	98.2
	1990	99.8	112.7	105.0
	1991	102.0	107.1	104.8
	1992	103.8	112.6	107.7
	1993	129.6	141.0	136.3
	1994	111.7	296.0	174.1
	1995	136.7	202.7	169.7
	1996	120.0	125.4	122.3
	1997	114.9	124.2	119.8
	1998	128.0	188.4	150.9
	1999	124.7	130.2	127.7
SEAMANS INLET	2000	126.4	127.9	127.2
	1991	850.1	1075.0	962.5
	1992	172.4	1350.0	837.6
	1993	118.5	658.0	388.2
	1994	451.0	1086.0	868.6
	1995	644.1	1150.0	897.0
	1996	103.7	456.0	319.7
	1997	335.0	992.0	751.6
	1998	344.0	1060.0	659.1
	1999	102.5	1198.5	469.2
	2000	129.6	329.0	225.8

Table 6.

**SPOFFORD LAKE
CHESTERFIELD**

**Specific conductance results from current and historic
sampling seasons. Results in uMhos/cm.**

Station	Year	Minimum	Maximum	Mean
SHIELD INLET	1992	109.6	140.5	125.0
	1993	175.0	175.0	175.0
	1994	164.3	164.3	164.3
	1995	194.2	194.2	194.2
	1996	115.8	181.3	148.5
	1997	164.2	164.2	164.2
	1998	171.1	202.7	186.9
	1999	288.7	587.8	438.2
	2000	102.7	185.5	152.2
SPOFFORD LAKE	1996	407.0	407.0	407.0
WARES GROVE INLET	1991	166.9	221.2	194.0
	1992	134.5	256.1	197.7
	1993	221.0	277.8	256.6
	1994	126.0	290.0	195.9
	1995	210.0	321.0	265.5
	1996	119.6	275.5	194.9
	1997	161.1	297.5	250.8
	1998	191.7	297.8	229.5
	1999	221.3	299.3	270.2
	2000	109.0	175.1	144.6

Table 8.

**SPOFFORD LAKE
CHESTERFIELD**

**Summary historical and current sampling season Total
Phosphorus data. Results in ug/L.**

Station	Year	Minimum	Maximum	Mean
CAMP INLET	1992	8	21	14
	1993	7	15	11
	1994	13	17	15
	1995	4	18	11
	1996	10	10	10
	1997	7	12	10
	1998	3	10	7
	1999	5	18	10
	2000	7	13	10
EPILIMNION	1988	< 1	4	2
	1990	7	13	11
	1991	4	6	5
	1992	1	7	4
	1993	4	8	5
	1994	5	9	7
	1995	3	4	3
	1996	3	10	6
	1997	10	15	12
	1998	1	8	4
	1999	3	6	4
	2000	< 5	7	6
HYPOLIMNION	1988	7	13	10

Table 8.

**SPOFFORD LAKE
CHESTERFIELD**

**Summary historical and current sampling season Total
Phosphorus data. Results in ug/L.**

Station	Year	Minimum	Maximum	Mean
	1990	15	26	20
	1991	8	20	12
	1992	6	14	8
	1993	11	15	13
	1994	9	33	19
	1995	7	23	12
	1996	3	12	7
	1997	5	20	13
	1998	3	74	29
	1999	4	19	11
	2000	< 5	6	5
INLET				
	1991	4	4	4
METALIMNION				
	1988	1	9	5
	1990	5	18	9
	1991	7	21	11
	1992	4	6	5
	1993	3	5	4
	1994	7	7	7
	1995	4	8	5
	1996	5	7	6
	1997	< 1	8	5
	1998	6	7	6
	1999	5	7	5

Table 8.

**SPOFFORD LAKE
CHESTERFIELD**

**Summary historical and current sampling season Total
Phosphorus data. Results in ug/L.**

Station	Year	Minimum	Maximum	Mean
OUTLET	2000	< 5	8	6
	1988	6	10	8
	1990	5	10	7
	1991	8	11	9
	1992	3	15	7
	1993	12	31	21
	1994	6	18	11
	1995	17	23	20
	1996	10	13	11
	1997	< 1	17	8
	1998	7	15	10
	1999	6	11	8
	2000	5	6	5
ROUND TREE				
	1996	11	11	11
SEAMANS INLET				
	1991	32	46	39
	1992	11	32	24
	1993	40	73	56
	1994	15	34	24
	1995	23	121	72
	1996	24	30	27
	1997	31	41	35
	1998	11	68	32

Table 8.

**SPOFFORD LAKE
CHESTERFIELD**

**Summary historical and current sampling season Total
Phosphorus data. Results in ug/L.**

Station	Year	Minimum	Maximum	Mean
SHIELD INLET	1999	31	46	36
	2000	16	27	21
	1992	7	9	8
	1993	17	17	17
	1994	7	7	7
	1995	6	6	6
	1996	6	9	7
	1997	5	5	5
	1998	5	6	5
	1999	6	8	7
	2000	< 5	38	21
	SPOFFORD LAKE			
1996	11	11	11	
WARES GROVE INLET				
1991	5	9	7	
1992	5	51	22	
1993	6	16	10	
1994	4	8	5	
1995	6	9	7	
1996	5	18	10	
1997	7	94	38	
1998	2	9	6	
1999	5	7	6	
2000	6	7	6	

Table 9.
SPOFFORD LAKE
CHESTERFIELD

Current year dissolved oxygen and temperature data.

Depth (meters)	Temperature (celsius)	Dissolved Oxygen (mg/L)	Saturation (%)
July 18, 2000			
0.1	23.3	7.7	90.1
1.0	23.3	7.7	90.3
2.0	23.2	7.6	88.7
3.0	23.2	7.2	84.4
4.0	23.2	6.9	81.0
5.0	23.1	6.9	80.1
6.0	23.0	6.7	78.6
7.0	17.8	8.3	87.4
8.0	15.0	8.9	88.4
9.0	12.8	9.3	88.1
10.0	11.4	9.2	83.9
11.0	10.5	8.7	77.8
12.0	9.9	8.2	72.8
13.0	9.5	7.5	65.6
14.0	9.2	5.8	50.4
15.0	9.0	4.6	39.6
16.0	8.9	3.9	33.4
17.0	8.8	3.4	29.1
18.0	8.8	3.1	26.5

Table 10.

**SPOFFORD LAKE
CHESTERFIELD**

Historic Hypolimnetic dissolved oxygen and temperature data.

Date	Depth (meters)	Temperature (celsius)	Dissolved Oxygen (mg/L)	Saturation (%)
June 15, 1988	18.0	8.3	3.5	29.0
July 26, 1988	15.5	9.0	5.1	44.0
July 19, 1990	22.0	8.0	1.6	13.5
July 16, 1991	18.0	8.5	2.4	20.4
July 14, 1992	17.0	8.5	4.6	39.2
July 14, 1992	19.0	8.5	3.5	29.8
July 20, 1993	19.0	8.0	3.1	26.0
July 19, 1994	19.0	8.0	3.0	25.0
July 18, 1995	18.0	8.5	3.9	32.0
July 17, 1996	18.0	9.2	2.0	17.0
July 15, 1997	17.5	9.7	2.4	21.0
July 14, 1998	17.0	7.7	3.0	25.0
July 13, 1999	18.0	8.9	1.4	12.5
July 18, 2000	18.0	8.8	3.1	26.5

Table 11.

**SPOFFORD LAKE
CHESTERFIELD**

**Summary of current year and historic turbidity sampling.
Results in NTU's.**

Station	Year	Minimum	Maximum	Mean
CAMP INLET	1997	0.1	2.4	1.1
	1998	0.1	10.0	3.5
	1999	0.9	5.4	2.5
	2000	0.1	0.7	0.3
EPILIMNION	1997	0.1	0.3	0.2
	1998	0.2	0.2	0.2
	1999	0.2	0.3	0.3
	2000	0.1	0.3	0.2
HYPOLIMNION	1997	0.2	2.3	1.0
	1998	0.2	1.9	0.9
	1999	0.2	1.2	0.6
	2000	0.2	1.3	0.6
METALIMNION	1997	0.2	0.3	0.2
	1998	0.3	0.4	0.3
	1999	0.3	0.5	0.4
	2000	0.2	0.3	0.3
OUTLET	1997	0.3	0.5	0.4
	1998	0.1	0.9	0.4
	1999	0.6	1.0	0.8
	2000	0.2	0.4	0.3

Table 11.**SPOFFORD LAKE
CHESTERFIELD****Summary of current year and historic turbidity sampling.
Results in NTU's.**

Station	Year	Minimum	Maximum	Mean
SEAMANS INLET	1997	0.8	3.9	2.5
	1998	0.5	3.5	1.6
	1999	3.6	6.8	4.7
	2000	0.6	1.7	1.3
SHIELD INLET	1997	0.8	0.8	0.8
	1998	0.9	2.3	1.6
	1999	1.8	3.6	2.7
	2000	1.3	18.4	7.3
WARES GROVE INLET	1997	0.1	0.2	0.2
	1998	0.2	0.6	0.4
	1999	0.3	0.6	0.5
	2000	0.7	0.9	0.8

Table 12.

**SPOFFORD LAKE
CHESTERFIELD**

**Summary of current year bacteria sampling.
Results in counts per 100ml.**

Location	Date	E. Coli <small>See Note Below</small>
B & K BEACH	July 18	3
B+K BEACH	June 13	18
	August 22	2
BOAT LAUNCH	June 13	7
	July 18	54
	August 22	5
CAMP INLET	June 13	1
CAMP SPOFFORD BEACH	July 18	7
	August 22	2
CLARKDALE BEACH	July 18	0
	August 22	1
CLARKDALE PIPE	June 13	20
	July 18	39
	August 22	55
FAMILY REC BEACH	July 18	2
	August 22	1
FOSTER	June 13	0
ISLAND EAST	June 13	0
ISLAND NORTH		

NOTE: "<" means "less than" and ">" means "greater than"

Table 12.

**SPOFFORD LAKE
CHESTERFIELD**

**Summary of current year bacteria sampling.
Results in counts per 100ml.**

Location	Date	E. Coli <small>See Note Below</small>
ISLAND NORTH	June 13	0
ISLAND WEST	June 13	0
KALICH	June 13	0
MOSHER	June 13	0
NORTH SHORE BEACH	June 13	2
	July 18	4
	August 22	3
NORTHEAST ISLAND	July 18	1
	August 22	0
NORTHWEST ISLAND	July 18	5
	August 22	2
QUARLES	July 18	14
SOUTHEAST ISLAND	June 13	0
	July 18	40
	August 22	1
SOUTHWEST ISLAND	July 18	6
	August 22	1
SPOFFORD HALL PIPE	June 13	5

NOTE: "<" means "less than" and ">" means "greater than"

Table 12.

**SPOFFORD LAKE
CHESTERFIELD**

**Summary of current year bacteria sampling.
Results in counts per 100ml.**

Location	Date	E. Coli <small>See Note Below</small>
SPOFFORD HALL PIPE	July 18	126
	August 22	70
SPOFFORD YACHT CLUB BEACH	July 18	19
	July 18	15
WARES BEACH	July 18	15
	August 22	12
WARES GROVE INLET	June 13	0
	June 13	0
YACHT CLUB	August 22	0